



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 184131

TO: Shailendra Kumar
Location: 5c03 / 5c18
Wednesday, May 10, 2006
Art Unit: 1621
Phone: 571-272-0640
Serial Number: 10 / 510409

From: Jan Delaval
Location: Biotech-Chem Library
Remsen 1a51
Phone: 571-272-2504

jan.delaval@uspto.gov

Search Notes

Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: S. Kumar Examiner #: 69594 Date: 4/4/06
 Art Unit: 1621 Phone Number: 2-0640 Serial Number: 10/510 409
 Location (Bldg/Room#): REM (Mailbox #): 5 C18 Results Format Preferred (circle): PAPER DISK

503

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

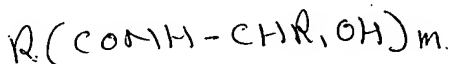
Title of Invention: Aromatic glycols and polyols, preparation process...
 Inventors (please provide full names): Franco Codignola

Earliest Priority Date: 4/8/02

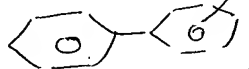
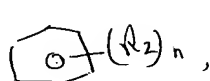
Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.



R



aliphatic chain, linear or branched

n is 0-4
 p is 0 to 6
 q is 0 to 8

R₁ same or different, H, alkyl
 m = 2-4

Also see claim 16 process

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: Jan _____ NA Sequence (#)
 Searcher Phone #: 22504 _____ AA Sequence (#)
 Searcher Location: _____ ☒ Structure (#)
 Date Searcher Picked Up: 5/10/06 _____ Bibliographic
 Date Completed: 5/10/06 _____ Litigation
 Searcher Prep & Review Time: 1 _____ Fulltext
 Online Time: 185 _____ Other

_____ STN _____ Dialog
 _____ Questel/Orbit _____ Lexis/Nexis
 _____ Westlaw _____ WWW/Internet
 _____ In-house sequence systems
 _____ Commercial _____ Oligomer _____ Score/Length
 _____ Interference _____ SPDI _____ Encode/Transl
 _____ Other (specify) _____



STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
22507, Remsen 1d86

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library CM1 – Circ. Desk



```
=> fil casreact
FILE 'CASREACT' ENTERED AT 09:24:51 ON 10 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)
```

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 7 May 2006 VOL 144 ISS 19

New CAS Information Use Policies, enter HELP USAGETERMS for details.

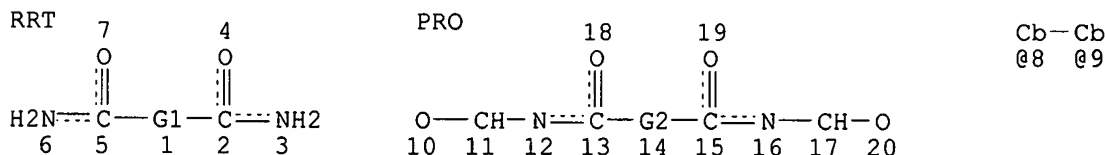
```
*****
*
*      CASREACT now has more than 10 million reactions      *
*
*****
```

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> d sta que
```

```
L1          STR
```



VAR G1=CB/8-5 9-2

VAR G2=CB/8-13 9-15

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

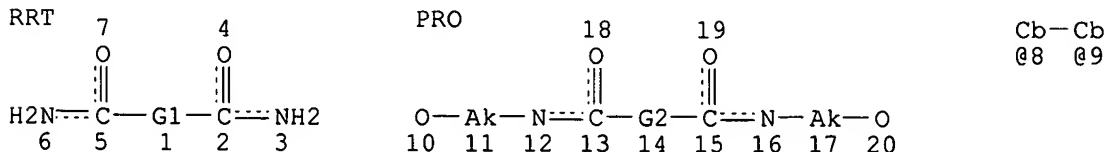
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE

```
L5          STR
```



VAR G1=CB/8-5 9-2

VAR G2=CB/8-13 9-15

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE
L7 3 SEA FILE=CASREACT SSS FUL L5 (5 REACTIONS)
L8 0 SEA FILE=CASREACT SUB=L7 SSS FUL L1 (0 REACTIONS)

100.0% DONE 0 VERIFIED 0 HIT RXNS 0 DOCS
SEARCH TIME: 00.00.01

=> => fil hcaplus
FILE 'HCAPLUS' ENTERED AT 09:58:56 ON 10 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 May 2006 VOL 144 ISS 20
FILE LAST UPDATED: 9 May 2006 (20060509/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 128 all hitstr tot

L28 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:818482 HCAPLUS
DN 139:308104
ED Entered STN: 17 Oct 2003
TI Aromatic glycols and polyols, preparation process and their use as monomers
IN Codignola, Franco
PA Eurotecnica Development & Licensing S.p.A, Italy
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C08G0063-685
ICS C07C0235-74; C07C0235-76; C07C0235-84
CC 35-2 (Chemistry of Synthetic High Polymers)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

jan delaval - 10 may 2006

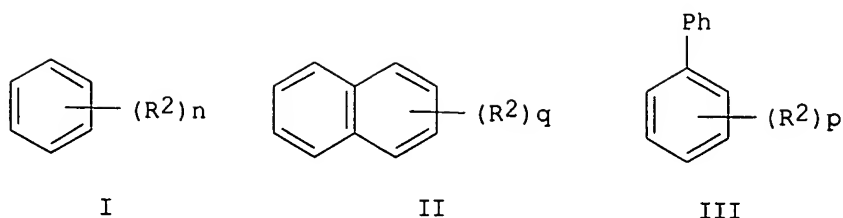
```

PI    WO 2003085026      A1      20031016      WO 2003-EP3665      20030408
      W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
          CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
          GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
          LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
          PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
          TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
      RW:  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
          KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
          FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
          BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
      AU 2003229628      A1      20031020      AU 2003-229628      20030408
      EP 1492835        A1      20050105      EP 2003-722425      20030408
      R:   AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
          IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
      US 2005215761      A1      20050929      US 2004-510409      20041005
PRAI  IT 2002-MI734      A      20020408
      WO 2003-EP3665      W      20030408

```

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003085026	ICM	C08G0063-685
	ICS	C07C0235-74; C07C0235-76; C07C0235-84
	IPCI	C08G0063-685 [ICM,7]; C07C0235-74 [ICS,7]; C07C0235-76 [ICS,7]; C07C0235-84 [ICS,7]
	IPCR	C07C0235-00 [I,C]; C07C0235-74 [I,A]; C07C0235-76 [I,A]; C07C0235-84 [I,A]; C08G0018-00 [I,C]; C08G0018-38 [I,A]; C08G0063-00 [I,C]; C08G0063-685 [I,A]; C08G0069-00 [I,C]; C08G0069-44 [I,A]
	ECLA	C07C235/74; C07C235/76; C07C235/84; C08G018/38F5B; C08G063/685; C08G069/44
AU 2003229628	IPCI	C08G0063-685 [ICM,7]; C07C0235-74 [ICS,7]; C07C0235-76 [ICS,7]; C07C0235-84 [ICS,7]
	IPCR	C07C0235-00 [I,C]; C07C0235-74 [I,A]; C07C0235-76 [I,A]; C07C0235-84 [I,A]; C08G0018-00 [I,C]; C08G0018-38 [I,A]; C08G0063-00 [I,C]; C08G0063-685 [I,A]; C08G0069-00 [I,C]; C08G0069-44 [I,A]
EP 1492835	IPCI	C08G0063-685 [ICM,7]; C07C0235-74 [ICS,7]; C07C0235-76 [ICS,7]; C07C0235-84 [ICS,7]
	IPCR	C07C0235-00 [I,C]; C07C0235-74 [I,A]; C07C0235-76 [I,A]; C07C0235-84 [I,A]; C08G0018-00 [I,C]; C08G0018-38 [I,A]; C08G0063-00 [I,C]; C08G0063-685 [I,A]; C08G0069-00 [I,C]; C08G0069-44 [I,A]
US 2005215761	IPCI	C08G0067-02 [ICM,7]
	IPCR	C07C0235-00 [I,C]; C07C0235-74 [I,A]; C07C0235-76 [I,A]; C07C0235-84 [I,A]; C08G0018-00 [I,C]; C08G0018-38 [I,A]; C08G0063-00 [I,C]; C08G0063-685 [I,A]; C08G0069-00 [I,C]; C08G0069-44 [I,A]
	NCL	528/392.000
	ECLA	C07C235/74; C07C235/76; C07C235/84; C08G018/38F5B; C08G063/685; C08G069/44
OS	MARPAT 139:308104	
GI		



AB Compds. are described, having the following general formula $R(\text{CONHCHR}_1\text{H})_m$ and their use as monomers in polymerization and polycondensation reactions, wherein R = residue obtained by substituting m hydrogen atoms by compound selected from (I), (II), (III), linear or branched C2-18 saturated aliphatic chain, or linear or branched C2-18 with at least one double bond, R2 = linear or branched C1-19 alkyl group when n, p, or q ≥ 2 , n = 0-4, p = 0-6, q = 0-8, R1 = hydrogen, optionally substituted C1-6 alkyl, and m = 2, 3, or 4. Thus, maleic diamide (1 equiv, 114.07 g) in 500 g Me alc. and 2.05 equiv formaldehyde in 40% water were agitated at 70° and the mixture was directly injected into a reactor containing Amberliste XE 275 to give a glycol, with a formula $\text{HOCH}_2\text{NHC}(\text{:O})\text{CH:CHC}(\text{:O})\text{NHCH}_2\text{OH}$.

ST arom glycol polyol polycondensation polymn monomer prepn

IT Bottles

Containers

Liquid crystals

Packaging materials

(aromatic glycols and polyols, preparation process and their use as monomers)

IT Polyamides, preparation

Polyesters, preparation

Polyurethanes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(aromatic glycols and polyols, preparation process and their use as monomers)

IT 17918-73-9P 33398-02-6P 609854-73-1P

RL: IMF (Industrial manufacture); PREP (Preparation)

(aromatic glycols and polyols, preparation process and their use as monomers)

IT 50-00-0, Formaldehyde, reactions 100-52-7, Benzaldehyde, reactions 628-94-4, Adipic diamide 928-01-8, Maleic diamide

1740-57-4, Isophthalic acid diamide 3010-82-0, Terephthalic acid diamide 6183-35-3, Pyromellitimide

10508-39-1, Trimellitimide 46711-49-3,

2,6-Naphthalenedicarboxamide 60541-32-4, Trimesamide

RL: RCT (Reactant); RACT (Reactant or reagent)

(aromatic glycols and polyols, preparation process and their use as monomers)

IT 100-21-0, Terephthalic acid, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(polycondensation monomers; aromatic glycols and polyols, preparation process

and their use as monomers)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Farbenfabriken Bayer; DE 1002326 B 1957 HCAPLUS

(2) Georg, W; KOLLOID-BEIHEFTE 1933, V37, P378

(3) McGrew, F; US 2364737 A 1944 HCAPLUS

(4) Volkova, L; US 3929731 A 1975 HCAPLUS

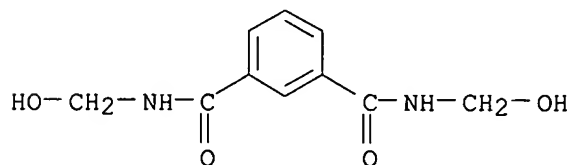
IT 33398-02-6P

RL: IMF (Industrial manufacture); PREP (Preparation)

(aromatic glycols and polyols, preparation process and their use as monomers)

RN 33398-02-6 HCAPLUS

CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



IT 50-00-0, Formaldehyde, reactions 100-52-7, Benzaldehyde,

reactions 1740-57-4, Isophthalic acid diamide 3010-82-0

, Terephthalic acid diamide 6183-35-3, Pyromellitimide

10508-39-1, Trimellitimide 46711-49-3,

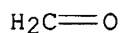
2,6-Naphthalenedicarboxamide 60541-32-4, Trimesamide

RL: RCT (Reactant); RACT (Reactant or reagent)

(aromatic glycols and polyols, preparation process and their use as monomers)

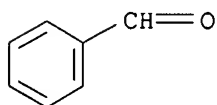
RN 50-00-0 HCAPLUS

CN Formaldehyde (8CI, 9CI) (CA INDEX NAME)



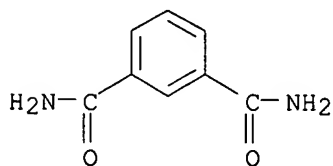
RN 100-52-7 HCAPLUS

CN Benzaldehyde (7CI, 8CI, 9CI) (CA INDEX NAME)



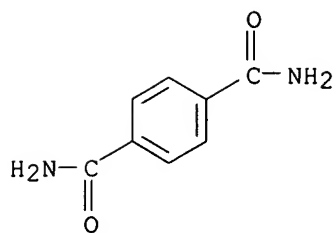
RN 1740-57-4 HCAPLUS

CN 1,3-Benzenedicarboxamide (9CI) (CA INDEX NAME)

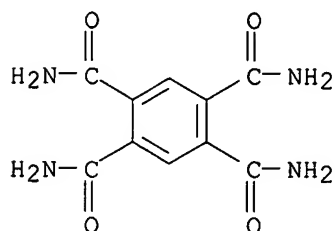


RN 3010-82-0 HCAPLUS

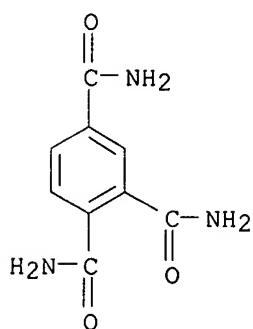
CN 1,4-Benzenedicarboxamide (9CI) (CA INDEX NAME)



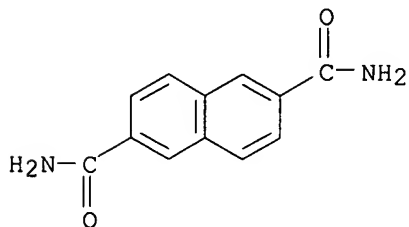
RN 6183-35-3 HCAPLUS
CN 1,2,4,5-Benzenetetracarboxamide (7CI, 8CI, 9CI) (CA INDEX NAME)



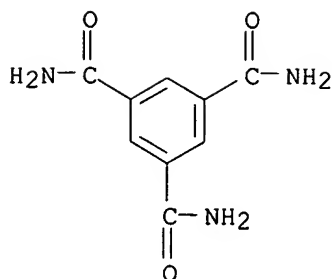
RN 10508-39-1 HCAPLUS
CN 1,2,4-Benzenetricarboxamide (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 46711-49-3 HCAPLUS
CN 2,6-Naphthalenedicarboxamide (6CI, 9CI) (CA INDEX NAME)



RN 60541-32-4 HCAPLUS
CN 1,3,5-Benzenetricarboxamide (9CI) (CA INDEX NAME)



L28 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1986:111377 HCAPLUS
 DN 104:111377
 ED Entered STN: 05 Apr 1986
 TI Aminomethyl-2-amino-1-naphthalenesulfonic acids
 IN Stoehr, Frank Michael; Schuendehuetten, Karl Heinz
 PA Bayer A.-G. , Fed. Rep. Ger.
 SO Ger. Offen., 8 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM C07C0143-60
 CC 41-9 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
 Section cross-reference(s): 25

FAN.CNT 1

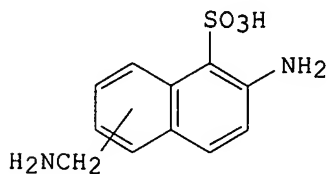
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3408300	A1	19850912	DE 1984-3408300	19840307
	EP 158073	A1	19851016	EP 1985-102040	19850225
	EP 158073	B1	19870422		
	R: CH, DE, FR, GB, LI				
	JP 60204755	A2	19851016	JP 1985-41357	19850304
	JP 04056827	B4	19920909		
PRAI	DE 1984-3408300	A	19840307		

CLASS

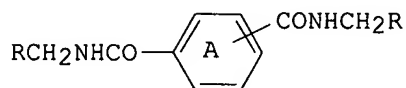
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 3408300	ICM	C07C0143-60
	IPCI	C07C0143-60 [ICM,4]
EP 158073	IPCI	C07C0143-60 [ICM,4]
JP 60204755	IPCI	C07C0143-60 [ICM,4]

OS MARPAT 104:111377

GI



I



II

AB The title compds. (I) are prepared by treating 2,1-H2NC10H6SO3H or its

N-acyl derivs. with II (R = OH, organic or inorg. acid residue; A may be addnl. substituted) in acid medium followed by saponification Only 0.5 mol II/mol

aminonaphthalenesulfonic acid is required. Thus, addition of 109 g 2,1-H₂NC₁₀H₆SO₃H to 60 g p-C₆H₄(CONHCH₂OH)₂ in 730 g concentrated H₂SO₄ at 5-10°, stirring for 12 h at room temperature, neutralization, and saponification of the bisamide in 2 N NaOH at 140° gave 2,5,1-H₂N(H₂NCH₂)C₁₀H₅SO₃H (95.5% yield, determined by diazotization).

ST aminomethylation Tobias acid; terephthalamide dimethylol agent aminomethylation; methylolterephthalamide agent aminomethylation; aminonaphthalenesulfonic acid aminomethylation

IT Aminomethylation (of Tobias acid by N,N'-dimethylolterephthalamide)

IT **32445-18-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminomethylation by, of Tobias acid)

IT 81-16-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminomethylation of, by dimethylolterephthalamide)

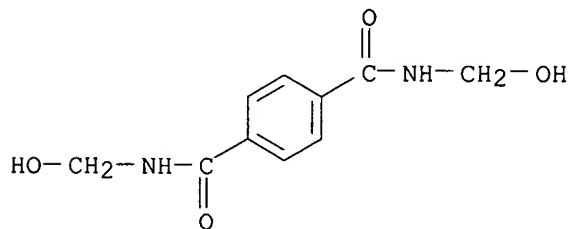
IT **3010-82-0P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

IT 52084-84-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)

IT **32445-18-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminomethylation by, of Tobias acid)

RN 32445-18-4 HCAPLUS

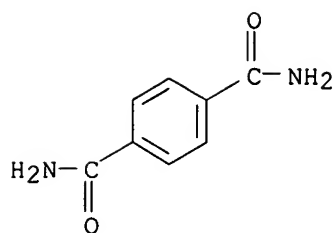
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



IT **3010-82-0P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

RN 3010-82-0 HCAPLUS

CN 1,4-Benzenedicarboxamide (9CI) (CA INDEX NAME)



=> d his

(FILE 'HOME' ENTERED AT 09:18:29 ON 10 MAY 2006)
SET COST OFF

FILE 'CASREACT' ENTERED AT 09:19:32 ON 10 MAY 2006

L1 STR
L2 0 S L1
L3 STR L1
L4 0 S L3
L5 STR L3
L6 0 S L5
L7 3 S L5 FUL
SAV KUMAR510C/A L7
L8 0 S L1 FUL SUB=L7
SAV L8 KUMAR510D/A

FILE 'CASREACT' ENTERED AT 09:24:51 ON 10 MAY 2006

FILE 'HCAPLUS' ENTERED AT 09:25:06 ON 10 MAY 2006

FILE 'REGISTRY' ENTERED AT 09:25:29 ON 10 MAY 2006
ACT KUMAR510B/A

L9 STR
L10 (287)SEA FILE=REGISTRY SSS FUL L9
L11 STR
L12 (23)SEA FILE=REGISTRY SUB=L10 SSS FUL L11
L13 6 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND C10H12N2O4

FILE 'HCAPLUS' ENTERED AT 09:25:35 ON 10 MAY 2006

L14 17 S L13

FILE 'REGISTRY' ENTERED AT 09:25:49 ON 10 MAY 2006

FILE 'HCAPLUS' ENTERED AT 09:25:53 ON 10 MAY 2006

SET SMARTSELECT ON
L15 SEL L14 1- RN : 227 TERMS
SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 09:25:53 ON 10 MAY 2006

L16 227 S L15
L17 221 S L16 NOT L13
L18 143 S L17 AND (46.150.18/RID OR C6-C6/ES)
L19 85 S L18 AND N>=2
L20 47 S L19 AND 1/NC

jan delaval - 10 may 2006

L21 41 S L20 AND O>=2
L22 6 S L21 AND (C8H8N2O2 OR C9H9N3O3 OR C10H10N4O4 OR C12H10N2O2)

FILE 'HCAPLUS' ENTERED AT 09:57:29 ON 10 MAY 2006
L23 2 S L22 AND L14
SEL RN

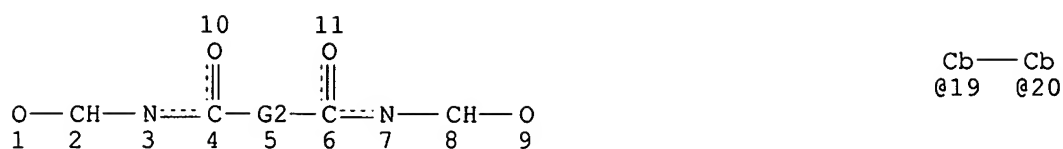
FILE 'REGISTRY' ENTERED AT 09:57:44 ON 10 MAY 2006
L24 17 S E1-E17
L25 9 S L24 NOT L13,L22
L26 2 S L25 AND (C7H6O OR CH2O)

FILE 'HCAPLUS' ENTERED AT 09:58:41 ON 10 MAY 2006
L27 1 S L26 AND L23
L28 2 S L23,L27

FILE 'HCAPLUS' ENTERED AT 09:58:56 ON 10 MAY 2006

=>

jan delaval - 10 may 2006



VAR G2=CB/19-4 20-6

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

L26 23 SEA FILE=REGISTRY SUB=L23 SSS FUL L24

L27 6 SEA FILE=REGISTRY ABB=ON PLU=ON L26 AND C10H12N2O4

=> d ide can tot 127

L27 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 70158-04-2 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with
1,4-bis(ethenyloxy)benzene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzene, 1,4-bis(ethenyloxy)-, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide (9CI)

$$\text{MF} \quad (\text{C}_{10} \text{H}_{12} \text{N}_2 \text{O}_4 \cdot \text{C}_{10} \text{H}_{10} \text{O}_2)_x$$

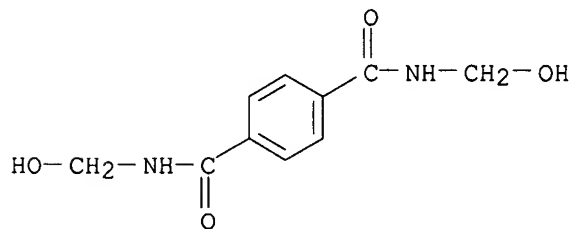
CI PMS

PCT Polyother, Polyvinyl

LC STN Files: CA, CAPLUS

CM 1

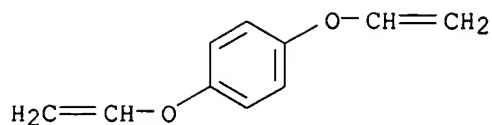
CRN 32445-18-4

C10H12N2O4

CM 2

CRN 4024-21-9

CMF C10 H10 O2



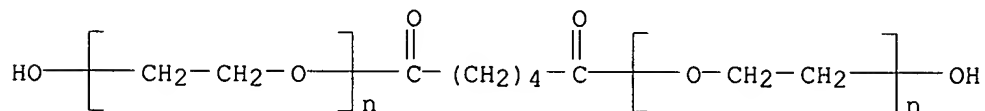
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 90:205546

L27 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
RN 66836-63-3 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with
 α,α' -(1,6-dioxo-1,6-hexanediyl)bis[ω -hydroxypoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Poly(oxy-1,2-ethanediyl), α,α' -(1,6-dioxo-1,6-hexanediyl)bis[ω -hydroxy-, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide (9CI)
MF (C10 H12 N2 O4 . (C2 H4 O)_n (C2 H4 O)_n C6 H10 O4)_x
CI PMS
PCT Polyether, Polyether
LC STN Files: CA, CAPLUS

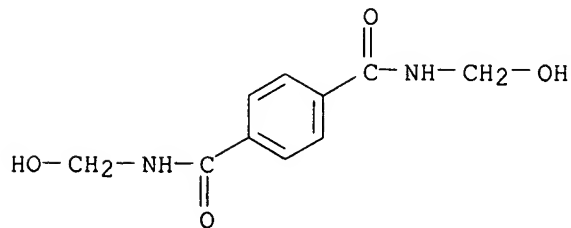
CM 1

CRN 40021-83-8
CMF (C2 H4 O)_n (C2 H4 O)_n C6 H10 O4
CCI PMS



CM 2

CRN 32445-18-4
CMF C10 H12 N2 O4



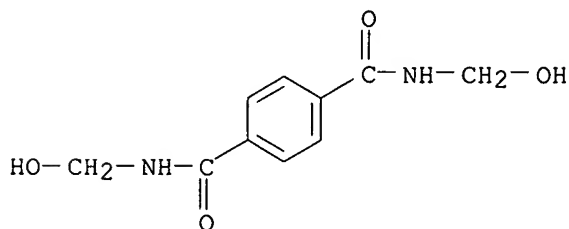
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 89:111185

L27 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 55884-91-8 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with
 1,1'-[oxybis(2,1-ethanediylloxy)]bis[ethene] (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Ethene, 1,1'-[oxybis(2,1-ethanediylloxy)]bis-, polymer with
 N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide (9CI)
 MF (C10 H12 N2 O4 . C8 H14 O3)x
 CI PMS
 PCT Polyother, Polyvinyl
 LC STN Files: CA, CAPLUS

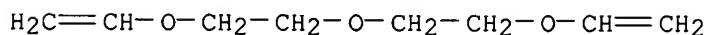
CM 1

CRN 32445-18-4
 CMF C10 H12 N2 O4



CM 2

CRN 764-99-8
 CMF C8 H14 O3



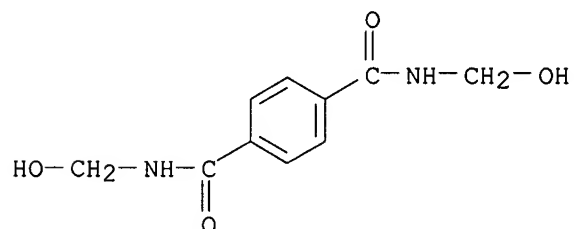
2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 89:111185

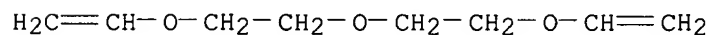
REFERENCE 2: 83:59840

L27 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 55185-42-7 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-ethanediylloxy)]bis[ethene] (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,2-Ethanediol, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, hexanedioic acid and 1,1'-[oxybis(2,1-ethanediylloxy)]bis[ethene] (9CI)
 CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with 1,2-ethanediol, hexanedioic acid and 1,1'-[oxybis(2,1-

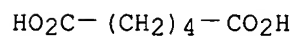
ethanediylloxy)]bis[ethene] (9CI)
 CN Ethene, 1,1'-[oxybis(2,1-ethanediylloxy)]bis-, polymer with
 N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and
 hexanedioic acid (9CI)
 MF (C10 H12 N2 O4 . C8 H14 O3 . C6 H10 O4 . C2 H6 O2)x
 CI PMS
 PCT Polyamide, Polyester, Polyester formed, Polyvinyl
 LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL
 CM 1
 CRN 32445-18-4
 CMF C10 H12 N2 O4



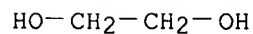
CM 2
 CRN 764-99-8
 CMF C8 H14 O3



CM 3
 CRN 124-04-9
 CMF C6 H10 O4



CM 4
 CRN 107-21-1
 CMF C2 H6 O2



3 REFERENCES IN FILE CA (1907 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 90:205546

REFERENCE 2: 83:59840

REFERENCE 3: 82:171696

L27 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 33398-02-6 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Isophthalamide, N,N'-bis(hydroxymethyl)- (8CI)

OTHER NAMES:

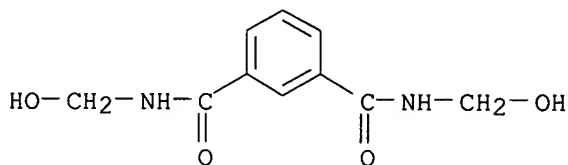
CN N,N'-Bis(hydroxymethyl)-1,3-benzenedicarboxamide

CN N,N'-Bis(hydroxymethyl)isophthalamide

FS 3D CONCORD

MF C10 H12 N2 O4

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)

5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:308104

REFERENCE 2: 106:34008

REFERENCE 3: 75:64907

REFERENCE 4: 61:62263

REFERENCE 5: 60:90605

L27 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 32445-18-4 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Terephthalamide, N,N'-bis(hydroxymethyl)- (8CI)

OTHER NAMES:

CN Dimethylolterephthalamide

CN N,N'-Bis(hydroxymethyl)terephthalamide

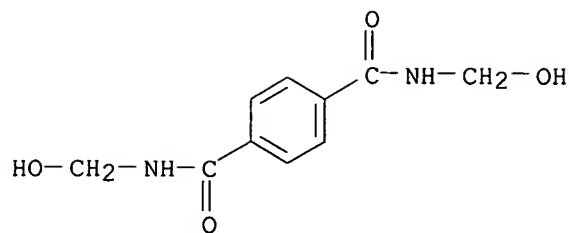
CN N,N'-Dimethylolterephthalamide

FS 3D CONCORD

MF C10 H12 N2 O4

CI COM

LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 104:111377
REFERENCE 2: 84:137169
REFERENCE 3: 80:71686
REFERENCE 4: 78:91055
REFERENCE 5: 77:68545
REFERENCE 6: 74:149188
REFERENCE 7: 27:52583
REFERENCE 8: 27:52582

=> d his

(FILE 'HOME' ENTERED AT 09:00:51 ON 10 MAY 2006)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:00:59 ON 10 MAY 2006

L1 1 S US20050215761/PN OR (US2004-510409# OR WO2003-EP3665 OR IT200
E CODIGNOLA/AU
L2 41 S E8
E EUROTEC/PA,CS
L3 2 S E69-E76
L4 26 S E90-E127
SEL RN L1

FILE 'REGISTRY' ENTERED AT 09:02:51 ON 10 MAY 2006

L5 14 S E1-E14
L6 1 S L5 AND C10H12N2O4
L7 STR
L8 0 S L7
L9 STR L7
L10 3 S L9
L11 STR L9
L12 0 S L11
L13 STR L11
L14 0 S L13
L15 STR L13

jan delaval - 10 may 2006

L16 0 S L15
 L17 STR L15
 L18 1 S L17
 L19 STR L17
 L20 13 S L19
 L21 STR L19
 L22 13 S L21
 L23 287 S L21 FUL
 SAV L22 KUMAR510/A
 L24 STR L13
 L25 1 S L24 SAM SUB=L23
 L26 23 S L24 FUL SUB=L23
 SAV L26 KUMAR510A/A
 L27 6 S L26 AND C10H12N2O4
 L28 6 S L6,L27
 SAV L27 KUMAR510B/A

FILE 'HCAOLD' ENTERED AT 09:14:12 ON 10 MAY 2006

L29 0 S L28

FILE 'USPATFULL, USPAT2' ENTERED AT 09:14:14 ON 10 MAY 2006

L30 4 S L28

FILE 'HCAPLUS' ENTERED AT 09:14:22 ON 10 MAY 2006

L31 17 S L28
 L32 1 S L31 AND L1-L4
 L33 17 S L31 AND (PY<=2003 OR PRY<=2003 OR AY<=2003)
 L34 17 S L31 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
 L35 17 S L31,L32

FILE 'REGISTRY' ENTERED AT 09:15:38 ON 10 MAY 2006

=> fil uspatall

FILE 'USPATFULL' ENTERED AT 09:16:00 ON 10 MAY 2006

CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 09:16:00 ON 10 MAY 2006

CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l30 bib abs hitstr tot

L30 ANSWER 1 OF 4 USPATFULL on STN

AN 2005:248561 USPATFULL

TI Aromatic glycols and polyols, preparation process and their use as monomers

IN Codignola, Franco, Milan, ITALY

PI US 2005215761 A1 20050929

AI US 2003-510409 A1 20030408 (10)

WO 2003-EP3665 20030408

20041005 PCT 371 date

PRAI IT 2002-MI734 20020408

DT Utility

FS APPLICATION

LREP HEDMAN & COSTIGAN P.C., 1185 AVENUE OF THE AMERICAS, NEW YORK, NY, 10036, US

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 319

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds are described, having the following general formula (A)
 $R(\text{CONH--CHR.sub.10H}).\text{sub.m}$ (A) and their use as monomers in
 polymerization and polycondensation reactions.

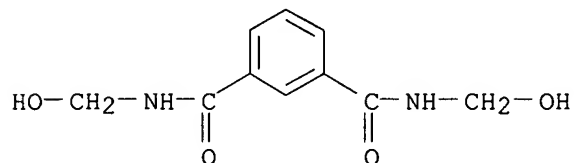
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 33398-02-6P

(aromatic glycols and polyols, preparation process and their use as
 monomers)

RN 33398-02-6 USPATFULL

CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L30 ANSWER 2 OF 4 USPATFULL on STN

AN 76:4918 USPATFULL

TI Dialkyl aromatic amidomethyl phosphonate flame retardants

IN Golborn, Peter, Lewiston, NY, United States

Duffy, James J., Buffalo, NY, United States

PA Hooker Chemicals & Plastics Corporation, Niagara Falls, NY, United
 States (U.S. corporation)

PI US 3935162 19760127

AI US 1974-531646 19741211 (5)

RLI Division of Ser. No. US 1973-393868, filed on 4 Sep 1973, now patented,
 Pat. No. US 3895161 which is a division of Ser. No. US 1972-239784,
 filed on 30 Mar 1972, now patented, Pat. No. US 3803269

DT Utility

FS Granted

EXNAM Primary Examiner: Hoke, V. P.

LREP Casella, Peter F., Crossetta, Jr., William J.

CLMN Number of Claims: 15

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 595

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New flame retardant materials are disclosed having applied thereto
 compounds of the formula: ##SPC1##

Wherein R is selected from the group consisting of phenyl, lower alkenyl
 and halogen substituted and unsubstituted lower alkyl of 1-6 carbon
 atoms, X is selected from the group consisting of chlorine, bromine and
 lower alkyl of 1-6 carbon atoms, m is an integer from 1-4 and n is an
 integer from 0-5, provided that the sum of m and n is not greater than 6
 and when m is 1, n is greater than 0.

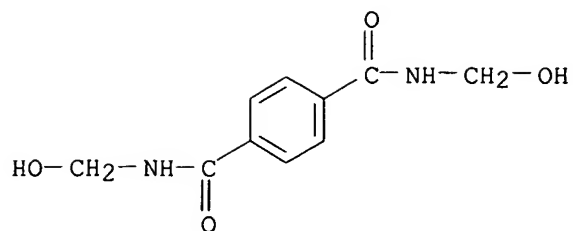
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 32445-18-4

(reaction of, with trimethyl phosphite)

RN 32445-18-4 USPATFULL

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L30 ANSWER 3 OF 4 USPATFULL on STN

AN 75:71621 USPATFULL

TI Process for the production of polymeric acetals containing urethane, carbamide and amide groups

IN Volkova, Leman Mustafa Kyzy, Noginsky raion, p/o Chernogolovka, ulitsa Pervaya, 15, kv. 7, Moskovskaya oblast, USSR

Korolev, Gennady Vladimirovich, Noginsky raion, p/o Chernogolovka, ulitsa Vtoraya, 3, kv. 1, Moskovskaya oblast, USSR

Dubovitsky, Fedor Ivanovich, Vorobievskoe shosse, 2b, kv. 12, Moscow, USSR

Trostyanskaya, Irina Ivanovna, Solnechny pereulok, 4, kv. 5, Gatchina Leningradskoi oblasti, USSR

Rappoport, Leonid Yakovlevich, Grazhdansky prospekt, 105, korpus 4, kv. 57, Leningrad, USSR

Petrov, Gennady Nikolaevich, Zheleznodorozhny pereulok, 7, kv. 35, Leningrad, USSR

Shestakovsky, Mikhail Fedorovich, PROSPEKT Mira, 49, kv. 108, Moscow, USSR

Yakubov, Renat Dovletovich, ULITSA Dimitrova, 81, kv. 14, Temirtau Karagandinskoi oblasti, USSR

Maximov, Sergei Mikhailovich, ULITSA Gertsena, 9, kv. 6, Temirtau Karagandinskoi oblasti, USSR

PI US 3929731 19751230

AI US 1974-483712 19740627 (5)

PRAI SU 1973-1929172 19730628

DT Utility

FS Granted

EXNAM Primary Examiner: Cockeram, H. S.

LREP Steinberg & Blake

CLMN Number of Claims: 29

ECL Exemplary Claim: 1,10

DRWN No Drawings

LN.CNT 831

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the production of polymeric acetals containing urethane, carbamide and amide groups and having the following general formula (1):
##EQU1## WHERE

R is an alkylene ##EQU2##

R' is an alkylene, an arylene, a biarylene, or is absent; ##EQU3## or is absent;

R" is an alkylene, an oxaalkylene, a cycloalkylene, an arylene, or a biarylene;

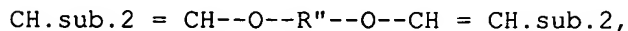
A has the following general formula (II): ##EQU4## where R''' is chain of a polymeric diol having OH end-groups with a molecular weight of from

500 to 5,000, or is absent;

N IS THE DEGREE OF POLYADDITION EQUAL TO FROM 10 TO 300, PREFERABLY FROM 20 TO 110, WHICH COMPRISES A POLYADDITION REACTION OF DIOLS OF THE FOLLOWING GENERAL FORMULA (III):



where R, R', X and X' are as in formula (I), or mixtures of said diols of formula (III) with polymeric diols having OH--end-groups of molecular weight of from 500 to 5,000, and divinyl ethers of the following general formula (IV):



where R'' is as given by formula (I), in the presence of an acid catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 55185-42-7P

(manufacture of, catalysts for)

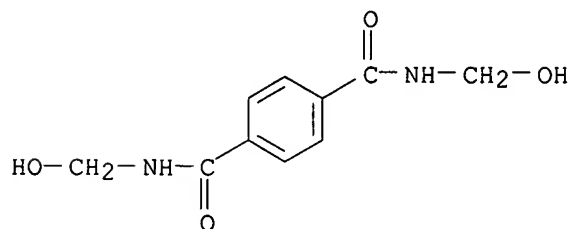
RN 55185-42-7 USPATFULL

CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-ethanediolyloxy)]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

CRN 32445-18-4

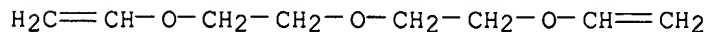
CMF C10 H12 N2 O4



CM 2

CRN 764-99-8

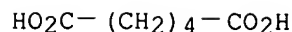
CMF C8 H14 O3



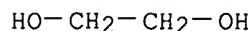
CM 3

CRN 124-04-9

CMF C6 H10 O4



CM 4

CRN 107-21-1
CMF C2 H6 O2

L30 ANSWER 4 OF 4 USPATFULL on STN
AN 75:36889 USPATFULL
TI Flame retardant materials
IN Golborn, Peter, Lewiston, NY, United States
Duffy, James J., Buffalo, NY, United States
PA Hooker Chemical & Plastics Corporation, Niagara Falls, NY, United States
(U.S. corporation)
PI US 3895161 19750715
AI US 1973-393868 19730904 (5)
RLI Division of Ser. No. US 1972-239784, filed on 30 Mar 1972, now patented,
Pat. No. US 3803269, issued on 9 Apr 1974
DT Utility
FS Granted
EXNAM Primary Examiner: Husack, Ralph; Assistant Examiner: Davis, Theodore G.
LREP Casella, Peter F., Studley, Donald C., Crossetta, Jr., William J.
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 541
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB New flame retardant materials are disclosed having applied thereon
compounds of the formula: ##SPC1##

Wherein R is selected from the group consisting of phenyl, lower alkenyl
and halogen substituted and unsubstituted lower alkyl of 1-6 carbon
atoms, X is selected from the group consisting of chlorine, bromine and
lower alkyl of 1-6 carbon atoms, m is an integer from 1-4 and n is an
integer from 0-5, provided that the sum of m and n is not greater than 6
and when m is 1, n is greater than 0.

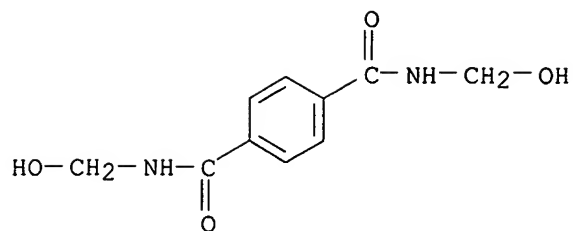
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 32445-18-4

(reaction of, with phosphite esters)

RN 32445-18-4 USPATFULL

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 09:16:15 ON 10 MAY 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 May 2006 VOL 144 ISS 20

FILE LAST UPDATED: 9 May 2006 (20060509/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l35 bib abs hitstr retable tot

L35 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:818482 HCAPLUS

DN 139:308104

TI Aromatic glycols and polyols, preparation process and their use as monomers

IN Codignola, Franco

PA Eurotecnica Development & Licensing S.p.A, Italy

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

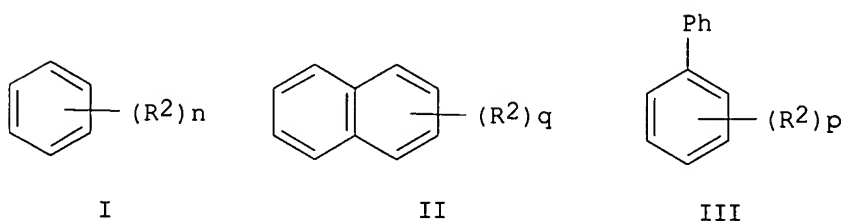
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003085026	A1	20031016	WO 2003-EP3665	20030408 <--
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,				
	PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,				

jan delaval - 10 may 2006

TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2003229628 A1 20031020 AU 2003-229628 20030408 <--
 EP 1492835 A1 20050105 EP 2003-722425 20030408 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2005215761 A1 20050929 US 2004-510409 20041005 <--
 PRAI IT 2002-MI734 A 20020408 <--
 WO 2003-EP3665 W 20030408 <--
 OS MARPAT 139:308104
 GI



AB Compds. are described, having the following general formula $R(\text{CONHCHR}_1\text{H})_m$ and their use as monomers in polymerization and polycondensation reactions, wherein R = residue obtained by substituting m hydrogen atoms by compound selected from (I), (II), (III), linear or branched C2-18 saturated aliphatic chain, or linear or branched C2-18 with at least one double bond, R2 = linear or branched C1-19 alkyl group when n, p, or q ≥ 2 , n = 0-4, p = 0-6, q = 0-8, R1 = hydrogen, optionally substituted C1-6 alkyl, and m = 2, 3, or 4. Thus, maleic diamide (1 equiv, 114.07 g) in 500 g Me alc. and 2.05 equiv formaldehyde in 40% water were agitated at 70° and the mixture was directly injected into a reactor containing Amberliste XE 275 to give a glycol, with a formula $\text{HOCH}_2\text{NHC}(\text{:O})\text{CH:CHC}(\text{:O})\text{NHCH}_2\text{OH}$.

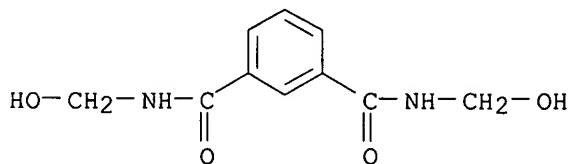
IT 33398-02-6P

RL: IMF (Industrial manufacture); PREP (Preparation)

(aromatic glycols and polyols, preparation process and their use as monomers)

RN 33398-02-6 HCAPLUS

CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



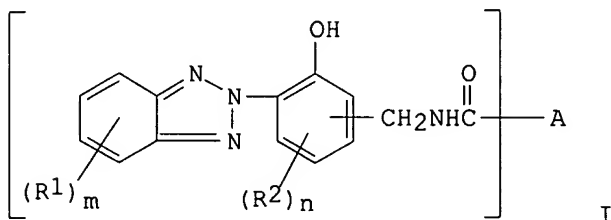
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Farbenfabriken Bayer	1957			DE 1002326 B	HCAPLUS
Georg, W	1933	37	378	KOLLOID-BEIHEFTE	

McGrew, F |1944 | |US 2364737 A |HCAPLUS
 Volkova, L |1975 | |US 3929731 A |HCAPLUS

L35 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1987:34008 HCAPLUS
 DN 106:34008
 TI Ultraviolet light absorbers of the 2-phenylbenzotriazole type
 IN Ozaki, Tatsuhiko; Sugiura, Masato; Sugiura, Fumitoshi
 PA Takemoto Oil and Fat Co., Ltd., Japan
 SO Eur. Pat. Appl., 20 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

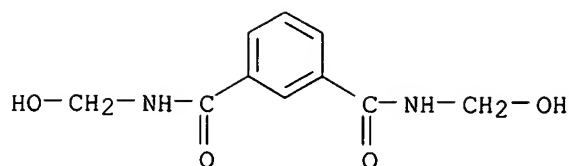
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 191582	A1	19860820	EP 1986-300687	19860131
	R: DE, FR, GB, IT				
	JP 61176640	A2	19860808	JP 1985-18190	19850131
	CA 1272729	A1	19900814	CA 1986-500695	19860130
PRAI	JP 1985-18190	A	19850131		
GI					



AB Compds. I (R1 and R2 = halogen, OH, C1-8 alkyl, or C1-18 alkoxy; A = phenylene, halo-containing phenylene, or naphthylene; m = 0-4, n = 0-3) are prepared for use as UV light absorbers. The absorbers have high vaporization temps. and good weather and thermal resistance and are useful in organic materials as light stabilizers. Thus 45.0 g 2-(2-hydroxy-5-methylphenyl)benzotriazole was dissolved in 300 g 97% H2SO4, cooled to 10°, treated with 22.4 g N,N'-bis(hydroxymethyl)-1,3-benzenedicarboxamide, and stirred 40 h to give 39.8 g I (m = 0, n = 1, R2 = Me located para to the OH, A = 1,3-phenylene) (II) having m.p. 236-237°, maximum absorption wavelength 341 nm, coefficient of mol. light absorption (using Cl2CHCHCl2) 3.51 + 104, and initial weight loss temps. (at a rate of 10°/min in N) 310°. II was used as a light stabilizer in nylon 6 and poly(ethylene terephthalate).

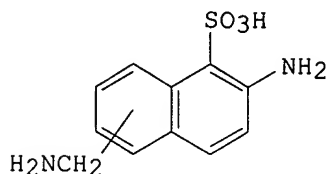
IT **33398-02-6**, N,N'-Bis(hydroxymethyl)-1,3-benzenedicarboxamide
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (condensation reaction of, with (hydroxymethylphenyl)benzotriazole)

RN 33398-02-6 HCAPLUS
 CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)

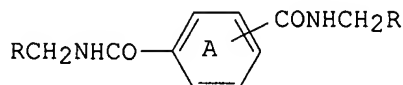


L35 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1986:111377 HCAPLUS
 DN 104:111377
 TI Aminomethyl-2-amino-1-naphthalenesulfonic acids
 IN Stoehr, Frank Michael; Schuendehuetten, Karl Heinz
 PA Bayer A.-G. , Fed. Rep. Ger.
 SO Ger. Offen., 8 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3408300	A1	19850912	DE 1984-3408300	19840307
	EP 158073	A1	19851016	EP 1985-102040	19850225
	EP 158073	B1	19870422		
	R: CH, DE, FR, GB, LI				
	JP 60204755	A2	19851016	JP 1985-41357	19850304
	JP 04056827	B4	19920909		
PRAI	DE 1984-3408300	A	19840307		
OS	MARPAT 104:111377				
GI					



I



II

AB The title compds. (I) are prepared by treating 2,1-H₂NC₁₀H₆SO₃H or its N-acyl derivs. with II (R = OH, organic or inorg. acid residue; A may be addnl. substituted) in acid medium followed by saponification Only 0.5 mol II/mol

aminonaphthalenesulfonic acid is required. Thus, addition of 109 g 2,1-H₂NC₁₀H₆SO₃H to 60 g p-C₆H₄(CONHCH₂OH)₂ in 730 g concentrated H₂SO₄ at 5-10°, stirring for 12 h at room temperature, neutralization, and saponification

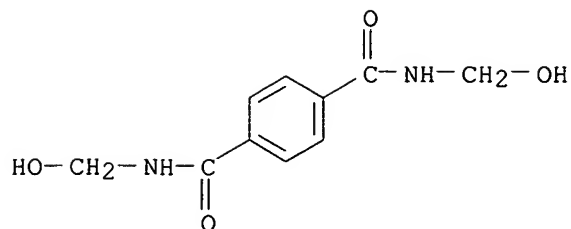
of the bisamide in 2 N NaOH at 140° gave 2,5,1-H₂N(H₂NCH₂)C₁₀H₅SO₃H (95.5% yield, determined by diazotization).

IT **32445-18-4**

RL: RCT (Reactant); RACT (Reactant or reagent)
 (aminomethylation by, of Tobias acid)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1979:205546 HCAPLUS
 DN 90:205546
 TI Polyacetals
 PA Institute of Chemical Physics, Chernogolovka, USSR; All-Union
 Scientific-Research Institute of Synthetic Rubber; Karaganda Synthetic
 Rubber Plant
 SO Jpn. Tokkyo Koho, 13 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53047159	B4	19781219	JP 1974-74187	19740628
	JP 51017300	A2	19760212		
PRAI	JP 1974-74187	A	19740628		

AB Polyacetals containing urethane, urea, and/or amide groups were prepared by treating vinyl ethers with hydroxyalkyl carbamates, methylolurea, and/or methylolated carboxamides. Thus, 31.2 g bis(2-hydroxyethyl) 2,4-xylylenedicarbamate [70158-36-0], dried at 80°/1 mm for 1 h, was treated with 11.4 g CH₂:CHOCH₂CH₂OCH:CH₂ in the presence of 0.47 g 4-MeC₆H₄SO₃H at 60° for 2 h to give 40 g copolymer [70163-95-0] having glass transition temperature -10° which formed elastic films and fibers.

IT **70158-04-2P**
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (preparation of)

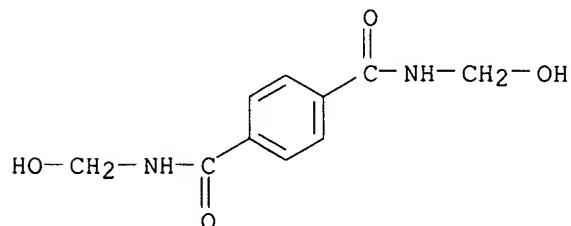
RN 70158-04-2 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with
 1,4-bis(ethenyloxy)benzene (9CI) (CA INDEX NAME)

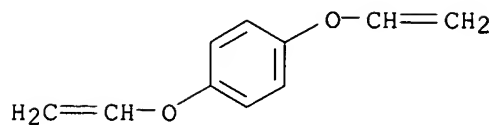
CM 1

CRN 32445-18-4

CMF C10 H12 N2 O4



CM 2

CRN 4024-21-9
CMF C10 H10 O2

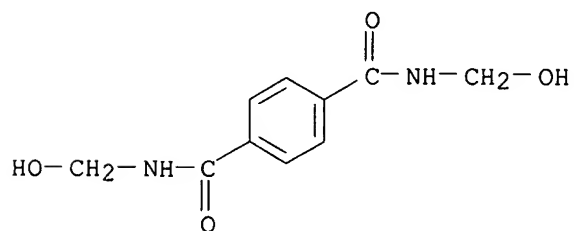
IT 55185-42-7

RL: USES (Uses)
(rubber)

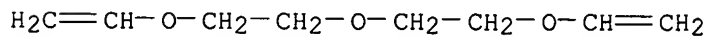
RN 55185-42-7 HCAPLUS

CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-ethanediylloxy)]bis[ethene] (9CI) (CA INDEX NAME)

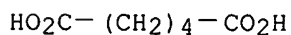
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4

CM 2

CRN 764-99-8
CMF C8 H14 O3

CM 3

CRN 124-04-9
CMF C6 H10 O4

CM 4

CRN 107-21-1
CMF C2 H6 O2

HO-CH₂-CH₂-OH

L35 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1978:511185 HCAPLUS
DN 89:111185
TI Polymeric acetals containing urethane, carbamide and amide groups
IN Volkova, L. M.; Korolev, G. V.; Dubovitskii, F. I.; Trostyanskaya, I. I.;
Rappoport, L. Ya.; Petrov, G. N.; Shestakovskii, M. F.; Yakubov, R. D.;
Maksimov, S. M.
PA Institute of Chemical Physics, Chernogolovka, USSR; All-Union
Scientific-Research Institute of Synthetic Rubber; Karaganda Synthetic
Rubber Plant
SO Can., 47 pp.
CODEN: CAXXA4
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	CA 1027696	A1	19780307	CA 1974-203533	19740626
	SU 518506	T	19760625	SU 1973-1929172	19730628
PRAI	SU 1973-1929172	A	19730628		

AB Acetal polymers containing urethane, urea, and amide linkages were prepared having good flexibility, elasticity, and heat stability. Thus, dried 2,4-xylylenebis(2-hydroxyethyl)carbamate 31.2, ethylene glycol divinyl ether 11.4, and p-toluenesulfonic acid 0.47 g were heated 2 h at 60° to give a copolymer [66822-52-4] having intrinsic viscosity 0.31 which could be converted to elastic films and fibers.

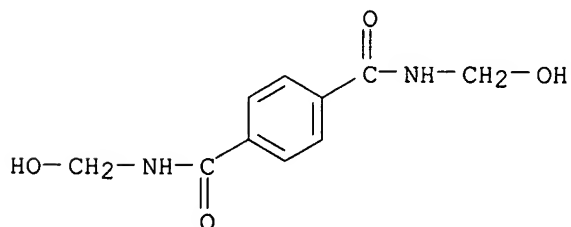
IT **55884-91-8P 66836-63-3P**
RL: PREP (Preparation)
(preparation of flexible heat-resistant)

RN 55884-91-8 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with
1,1'-[oxybis(2,1-ethanediylxy)]bis[ethene] (9CI) (CA INDEX NAME)

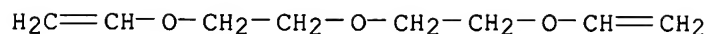
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



CM 2

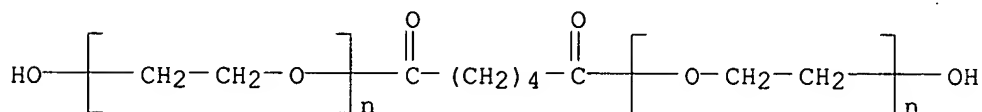
CRN 764-99-8
CMF C8 H14 O3



RN 66836-63-3 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with
 α,α' -(1,6-dioxo-1,6-hexanediyl)bis[ω -hydroxypoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

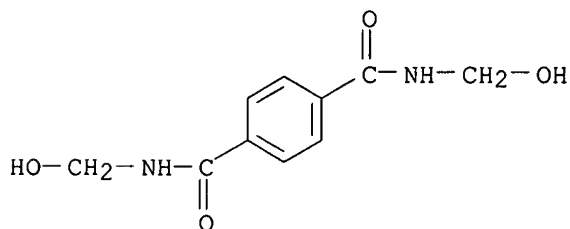
CM 1

CRN 40021-83-8
CMF (C2 H4 O)_n (C2 H4 O)_n C6 H10 O4
CCI PMS



CM 2

CRN 32445-18-4
CMF C10 H12 N2 O4



L35 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1976:137169 HCAPLUS
DN 84:137169
TI Dialkyl aromatic amidomethyl phosphonate flame retardants
IN Golborn, Peter; Duffy, James J.
PA Hooker Chemicals and Plastics Corp., USA
SO U.S., 10 pp. Division of U.S. 3,895,161.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3935162	A	19760127	US 1974-531646	19741211
	US 3803269	A	19740409	US 1972-239784	19720330
	US 3895161	A	19750715	US 1973-393868	19730904
PRAI	US 1972-239784	A3	19720330		

US 1973-393868 A3 19730904

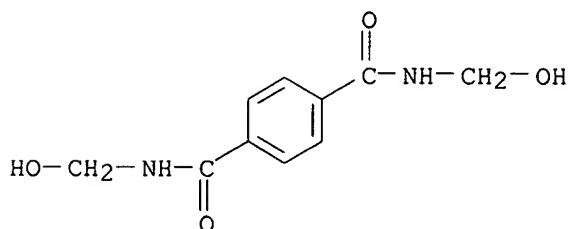
AB Dialkyl aromatic amidoethyl phosphates, added in relatively small amts. to textiles, thermoplastics, or thermosetting resins, produced satisfactory flame retardant compns. with no problems of recrystn. or oiling-out. Thus, rayon staple fiber was padded to a 100% wet pickup with a solution containing N-[(dimethylphosphono)methyl]-p-toluamide [51304-12-2] 25, 40% formalin 37.5, NH₄Cl 3.1, and 50% solution of methylolated melamine 14.0 g at pH 7, dried 3 min at 250°F and cured 10 min at 350°F. The treated samples self-extinguished immediately in flammability tests while untreated samples were completely consumed; the flame retardancy was retained after 5 home washes.

IT 32445-18-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with trimethyl phosphite)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1975:459840 HCAPLUS

DN 83:59840

TI Polyacetals

PA Institute of Chemical Physics, Chernogolovka, USSR; All-Union
Scientific-Research Institute of Synthetic Rubber; Karaganda Synthetic
Rubber Plant

SO Neth. Appl., 27 pp.

CODEN: NAXXAN

DT Patent

LA Dutch

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 7408640	A	19741231	NL 1974-8640	19740627
	NL 159686	B	19790315		
	SU 518506	T	19760625	SU 1973-1929172	19730628
PRAI	SU 1973-1929172	A	19730628		

AB Polyacetals containing urylene, NHCO₂, or NHCO groups were prepared from diols containing these groups and divinyl ethers. Thus, 31.2 g 2,4-xylylenebis(2-hydroxyethyl carbamate) was dried, mixed with 11.4 g ethylene glycol divinyl ether and 0.47 g p-toluenesulfonic acid, and heated 2 hr at 60°, giving 40 g yellowish-white flexible polymer [55219-72-2] which had intrinsic viscosity 0.31 and glass temperature -10° and could be formed into elastic films and fibers.

IT 55185-42-7P 55884-91-8P

RL: PREP (Preparation)
(preparation of)

RN 55185-42-7 HCAPLUS

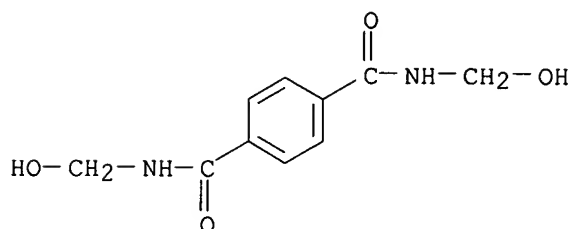
CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-

ethanediylloxy)]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

CRN 32445-18-4

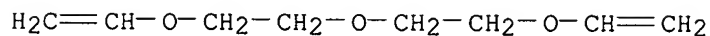
CMF C10 H12 N2 O4



CM 2

CRN 764-99-8

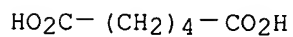
CMF C8 H14 O3



CM 3

CRN 124-04-9

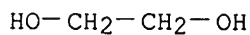
CMF C6 H10 O4



CM 4

CRN 107-21-1

CMF C2 H6 O2



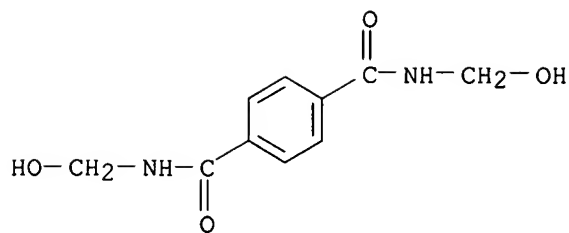
RN 55884-91-8 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with
1,1'-[oxybis(2,1-ethanediylloxy)]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

CRN 32445-18-4

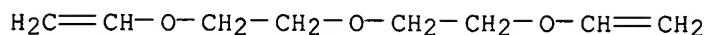
CMF C10 H12 N2 O4



CM 2

CRN 764-99-8

CMF C8 H14 O3



L35 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1975:171696 HCAPLUS

DN 82:171696

TI Acetal polymers containing urethane, carbamide, and amide groups

IN Volkova, L. M.; Korolev, G. V.; Dubovitskii, F. I.; Trostyanskaya, I. I.; Rappoport, L. Ya.; Petrov, G. N.; Shestakovskii, M. F.; Yakubov, R. D.; Maksimov, S. M.

PA Institute of Chemical Physics, Chernogolovka; All-Union-Scientific Research Institute of Synthetic Rubber; Karaganda Synthetic Rubber Plant

SO Ger. Offen., 38 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2431032	A1	19750116	DE 1974-2431032	19740627
	DE 2431032	C2	19830922		
	SU 518506	T	19760625	SU 1973-1929172	19730628
PRAI	SU 1973-1929172	A	19730628		

AB The polymerization of carbamates with glycols and vinyl ethers in the presence of

acid catalysts gave amide and urethane containing polyacetals having elastic and strength properties of polyurethanes and polyamides. Thus, a mixture of dry bis(2-hydroxyethyl) 4-methyl-m-phenylenedicarbamate 31.2, 1,2-bis(vinyloxy)ethane 11.4, and p-toluenesulfonic acid [104-15-4] 0.47 g was stirred for 2 hr at 60° to give 40 g yellowish white copolymer [55219-72-2] with 0.31 inherent viscosity, and -10° freezing temperature

IT 55185-42-7P

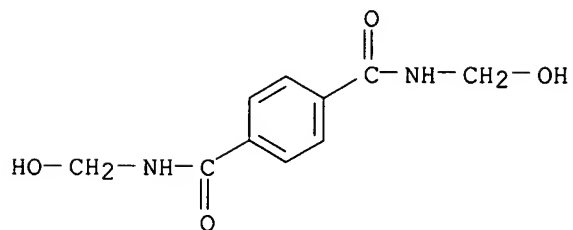
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, catalysts for)

RN 55185-42-7 HCAPLUS

CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-ethanediyl oxy)]bis[ethene] (9CI) (CA INDEX NAME)

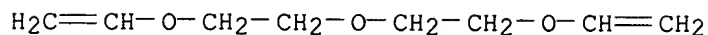
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



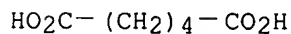
CM 2

CRN 764-99-8
CMF C8 H14 O3



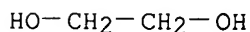
CM 3

CRN 124-04-9
CMF C6 H10 O4



CM 4

CRN 107-21-1
CMF C2 H6 O2



L35 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1974:71686 HCAPLUS

DN 80:71686

TI Phosphoric acid derivatives as flame proofing agents for textiles and thermoplastic, thermosetting or elastomeric synthetic resins

IN Duffy, James J.; Golborn, Peter

PA Hooker Chemical Corp.

SO Ger. Offen., 41 pp.

CODEN: GWXXBX

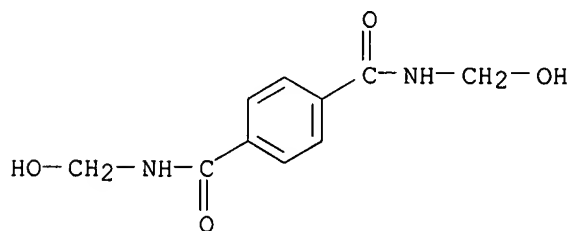
DT Patent

LA German

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	DE 2316043	A1	19731018	DE 1973-2316043	19730330

US 3803269 A 19740409 US 1972-239784 19720330
 US 3823206 A 19740709 US 1972-239793 19720330
 PRAI US 1972-239784 A 19720330
 US 1972-239793 A 19720330
 AB The compds. [(RO)2P(O)CH2NHCO)nZ (R = Ph, alkyl, alkenyl, haloalkyl; Z = alkylene, haloarylene; n = 1-4) are flame retardants resistant to crystallization and migration. Thus, addition over 5 min of 57.5 g 3-bromo-N-(hydroxymethyl)benzamide [51053-05-5] to 124 g trimethyl phosphite [121-45-9] at 100.deg. and heating 3 hr at 95.deg. gives 81 g dimethyl [(m-bromobenzamido)methyl]phosphonate (I) [51053-06-6] as an oil. ABS polymer [9003-56-9] containing 30% I has O index (ASTM D 2863-70) 24 and flammability rating (ASTM D 635-68) NB.
 IT 32445-18-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with phosphite esters)
 RN 32445-18-4 HCAPLUS
 CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1973:91055 HCAPLUS
 DN 78:91055
 TI Photosensitive copying material
 PA Kalle A.-G.
 SO Fr., 23 pp.
 CODEN: FRXXAK
 DT Patent
 LA French
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2115948	A5	19720707	FR 1971-41828	19711123
	DE 2057473	A	19720525	DE 1970-2057473	19701123
	DE 2057473	C2	19820408		
PRAI	DE 1970-2057473	A	19701123		

AB The title material is coated with a mixture of a light-sensitive diazonium compound, a crosslinking agent, and a binder. Imagewise exposure produces hardening of the coating in the exposed areas, while the coating in unexposed areas can be removed by washing with H2O. Suitable diazonium compds. have 2 benzene rings linked together by a simple bond or -O-, -S-, -NH-, or -CONH- groups. Particularly suitable are 3-methyldiphenylamine-4-diazonium and 3-methoxydiphenylamine-4-diazonium salts. Suitable crosslinking agents are methylol derivs. Suitable binders are those which are soluble in H2O or exhibit swelling in contact with H2O, e.g. poly(vinyl alc.), partially hydrolyzed poly(vinyl acetate), Me cellulose, etc. Thus, a polyamide screen was coated with a mixture of 25 g hydroxyethyl cellulose, 3 g diphenylamine-4-diazonium sulfate, 8 ml of a 2% solution of dimethylolpropyleneurea (tetrahydro-1,3-bis(hydroxymethyl)-2-(1H)-

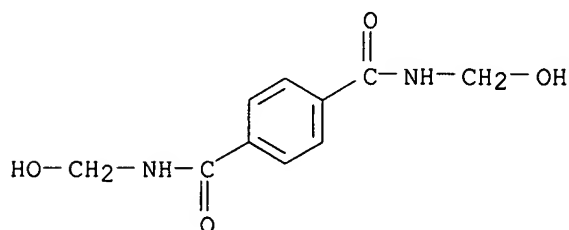
pyrimidinone), and 200 ml H₂O. The material was dried at 30-50°, imagewise exposed to uv through a diapositive, and washed with H₂O. A serigraphic plate suitable for printing was obtained.

IT 32445-18-4

RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agent, for photosensitive diazonium compns. for serigraphic printing stencils)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1972:468545 HCAPLUS

DN 77:68545

TI Light-sensitive copying material

IN Steppan, Hartmut; Ruckert, Hans; Reichel, Maximilian Karl

PA Kalle A.-G.

SO Ger. Offen., 43 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2057473	A	19720525	DE 1970-2057473	19701123
	DE 2057473	C2	19820408		
	FR 2115948	A5	19720707	FR 1971-41828	19711123
	JP 54037488	B4	19791115	JP 1971-94399	19711124
PRAI	DE 1970-2057473	A	19701123		

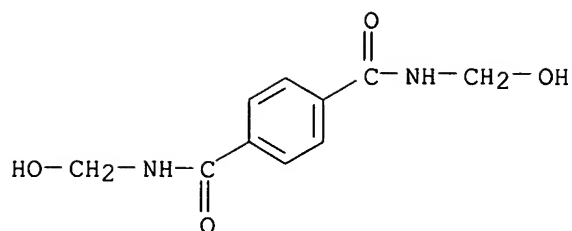
AB The light-sensitive copying material of good tanning action, developable by H₂O, and useful for silk-screen printing, consisted of an aromatic diazonium salt, e.g. 4-anilinobenzenediazonium sulfate (I) or its 2-methoxy derivative capable of condensation, ≥1 binder, e.g. hydroxyethyl cellulose (II), poly(vinyl alc.), or poly(vinyl acetate), and ≥1 crosslinking compound of the type dimethylolpropyleneurea (III), 2,4,6-trimethylolphenol, N,N'-dimethylolterephthalamide, or N,N'-dimethyloldithiodiacetamide. Thus, a polyamide silk-screen textile was coated with a solution consisting of 25 parts II, 3 parts I, and 8 parts by volume 2% III in 200 parts by volume H₂O, dried at 30-50°, exposed behind a pattern for 5 min to the uv radiation of C arc lamp, and developed by H₂O to give silk-screen form of good strength.

IT 32445-18-4

RL: USES (Uses)
(photosensitive compns. containing diazonium compds. and, for silk-screen stencils)

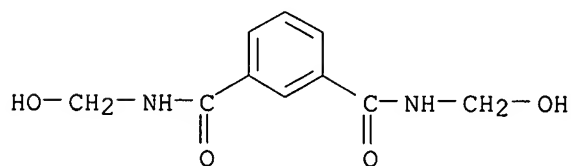
RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1971:464907 HCAPLUS
 DN 75:64907
 TI Poly(oxymethylene) copolymers stabilized with 3,5-diamino-1,2,4-triazole
 IN Gerlach, Dieter; Bader, Erich
 PA Deutsche Gold- und Silber-Scheideanstalt vorm. Roessler
 SO U.S., 3 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3585165	A	19710615	US 1969-793555	19690123
	DE 1694005	A	19720309	DE 1968-D55204	19680127
PRAI	DE 1968-D55204	A	19680127		
AB	3,5-Diamino-1,2,4-triazole (I) is incorporated with trioxane-1,3-dioxepane block copolymer (II) or trioxanedioxolane copolymer to improve their heat resistance. Trioxane was block copolymerized with 3% 1,3-dioxepane in the presence of Me3CClO4, II hydrolyzed, the product mixed at 180° with 0.2% 2,2-methylenebis(4-methyl-6-tert-butylphenol) and 0.8% I to give a product with improved heat resistance.				
IT	33398-02-6 RL: USES (Uses) (reaction products with imidazolidinone, stabilizers)				
RN	33398-02-6 HCAPLUS				
CN	1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)				



L35 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1971:149188 HCAPLUS
 DN 74:149188
 TI Light-sensitive condensation products of aromatic diazonium salts for use in preparing copying material
 IN Steppan, Hartmut
 PA Kalle A.-G.
 SO Ger. Offen., 242 pp.
 CODEN: GWXXBX
 DT Patent
 LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2024242	A	19701217	DE 1970-2024242	19700519
	DE 2024242	C2	19840920		
	NL 7006716	A	19701124	NL 1970-6716	19700508
	NL 174835	B	19840316		
	NL 174835	C	19840816		
	SE 386435	B	19760809	SE 1970-6692	19700515
	SU 660590	D	19790430	SU 1970-1435301	19700515
	ES 379775	A1	19730201	ES 1970-379775	19700518
	PL 92450	P	19770430	PL 1970-140707	19700518
	IL 34548	A1	19850430	IL 1970-34548	19700518
	ZA 7003394	A	19710630	ZA 1970-3394	19700519
	GB 1312926	A	19730411	GB 1970-24219	19700519
	AT 763971	A	19750415	AT 1971-7639	19700519
	CA 971160	A1	19750715	CA 1970-83040	19700519
	NO 133756	B	19760315	NO 1970-1905	19700519
	FI 53896	B	19780502	FI 1970-1393	19700519
	CH 607098	A	19781130	CH 1970-7389	19700519
	DK 143621	B	19810914	DK 1970-2535	19700519
	DK 143621	C	19820215		
	BE 750693	A	19701120	BE 1970-750693	19700520
	FR 2048537	A5	19710319	FR 1970-18227	19700520
	JP 49045323	B4	19741203	JP 1970-42826	19700520
	US 3849392	A	19741119	US 1972-224324	19720207
PRAI	US 1969-826296	A	19690520		

GI For diagram(s), see printed CA Issue.

AB An aromatic diazonium compound I, where R is C1-5 alkyl and X is the anion of the diazonium compound, is condensed in a strongly acid medium with II, where M is a single element, an alkylene chain or -oxyalkyleneoxy-, oxyalkyleneoxyalkyleneoxy-, -oxyaryleneoxy-, -O-, or -S-; R1 and R2 are H, C1-3 alkyl, C1-3 alkoxy, or a halogen; t and u = 1 to 4. As a condensation medium, H3PO4, H2SO4, or MeSO3H, 70-100% concentration, may be used

at 10-70°. E.g., 4-methoxydiphenylamine-4'-diazonium sulfate (91%) 17.75 g is dissolved in 150 ml 86% H3PO4. Dimethylolterephthaamide 11.2 g, fine powder, is added with vigorous stirring and the mixture is condensed 21 hr at room temperature. The raw condensate is dissolved in 1 l. H2O at 40° and the condensate is extracted with 200 ml 50% ZnCl2. The double salt is dissolved in 500 ml H2O at 50° and is precipitated again with ZnCl2 to give 26.8 g product. The condensate is mixed with pigment, such as Crystal Violet, dissolved in ethylene glycol monomethyl ether, coated on paper, Al foil, or on a metal plate, dried, exposed to an image under an arc lamp and developed in a mixture of water, Na lauryl sulfate, tartaric acid, and benzyl alc.

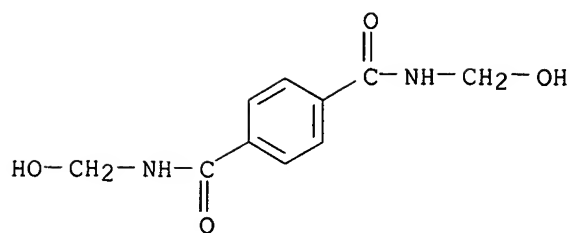
IT 32445-18-4

RL: USES (Uses)

(reaction products with aromatic diazonium salts, light-sensitive compns. containing, for photoduplication)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1964:462263 HCAPLUS

DN 61:62263

OREF 61:10841h,10842a-b

TI Thermoplastic molding composition containing high-molecular-weight polyformaldehyde and nitrogen compounds

IN Schmidt, Franz; Schwarz, Erich

PA Badische Anilin- & Soda-Fabrik A.-G.

SO 4 pp.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1173245		19640702	DE 1961-B63389	19610725

AB A molding composition stabilized against heat and O can be obtained by mixing together polyformaldehyde (I) with stabilized end-groups and oligomeric N compds. consisting of a product obtained by melting together (A) a dicarboxylic acid diamide hydroxymethylated at both N atoms with (B) a carboxylic acid amide containing 2 carboxamide groups having an alkyl, aryl, or aralkyl group linked to N, or urea or derivative thereof, or mixture of these

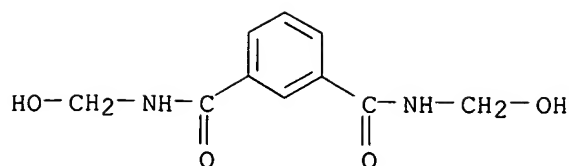
compds. The molar ratio of A to B varies from 1.2: 1 to 1:1.2, preferably 1:1, if the N atoms of the carboxylic acid amides are unsubstituted; and varies from 3:1 to 1:1 if substituted N atoms are used. If urea or derivative is used A to B varies from 2:1 to 1:2. As costabilizers phenolic antioxidants can be added, such as 2,2'-methylenebis(4-ethyl-6-tert-butylphenol). Thus, 20.2 parts pulverized N,N'-bis(hydroxymethyl)isophthalamide and 18.6 parts pulverized azelaamide (mole ratio 0.9:1) were heated at 220° in a tube under N during 20-40 min. After allowing water vapor and HCHO to escape from the melt, cooling down under N, and grinding, a clear yellow product, m. 170-95°, was obtained. Then 20 g. acetylated I, 0.3% by weight benzaldehyde 1-methyl-1-phenylhydrazone, and 1.5% by weight of yellow product were mixed in a ball mill. After heating at 222° during 80 min., the stabilized I had a weight loss of 4.3-5.2% (unstabilized I showed a weight loss of 55-65%).

IT 33398-02-6, Isophthalamide, N,N'-bis(hydroxymethyl)-

(reaction product with azelaamide, as stabilizer for polyoxymethylenes)

RN 33398-02-6 HCAPLUS

CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1964:90605 HCAPLUS

DN 60:90605

OREF 60:15788e-g

TI Paraformaldehyde stabilizers

IN Schmidt, Franz; Schwartz, Erich

PA Badische Anilin- & Soda-Fabrik A.-G.

SO 14 pp.

DT Patent

LA Unavailable

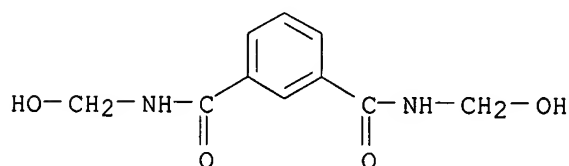
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 626989		19630710	BE	19630110

AB Paraformaldehyde can be stabilized by reaction products of the N,N'-dihydroxymethylisophthalamide (I) with the diamides of dicarboxylic acids. Thus, I 20.2 and sebacamide (II) 20 parts is heated to 220° under N during 20-40 min. to give a product (III) m. 175-205°. The stabilizing effect is shown by the following comparison. Paraformaldehyde acetylated (20 g.) and 0.3% PhCH:NNMePh are mixed in a ball mill with 1.5% III, and the mixture is heated in air at 222 ° for 80 min.; loss in weight, 5%. With 2% II instead of III, loss in weight is 12-14%. Without any stabilizer, the weight loss is 55-65%. N,N'-Diacetylenehydrazine, biuret, and azelaic acid diamide were also used instead of II.

IT 33398-02-6, Isophthalamide, N,N'-bis(hydroxymethyl)-
(reaction products with amides, as stabilizers for polyoxymethylenes)

RN 33398-02-6 HCAPLUS

CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1933:52583 HCAPLUS

DN 27:52583

OREF 27:4698c-d

TI The constitution of artificial resins. IV. Resins from aryl sulfonamido carboxylic acid amides and the products obtained from aryl dicarboxylic acid amides

AU Walter, Georg; Storfer, Ernst

SO Kolloid-Beihfte (1933), 37, 378-84

CODEN: KOBEAN; ISSN: 0368-6345

DT Journal

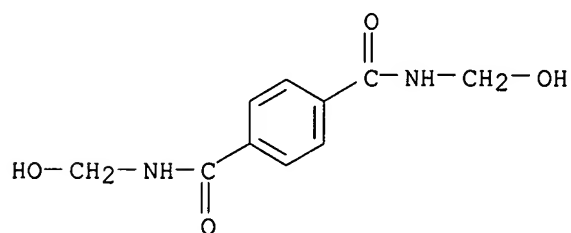
LA Unavailable

AB Hardenable resins are obtained from aryl sulfonamido carboxylic acid amides (e. g., p-H₂NSO₂C₆H₄CONH₂) by condensation with CH₂O. They are hydrophilic, whereas the sulfonamide resins themselves are hydrophobic. Aryl dicarboxylic acid diamides do not resinify when treated with CH₂O. From terephthalic acid diamide, for example, a crystalline dimethylol compound, CH₂(OH)NHCOC₆H₄CONHCH₂OH, m. 331-3°, was obtained, which could not be resinified.

IT **32445-18-4**, Terephthalamide, N,N'-bis(hydroxymethyl)-
(preparation of)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1933:52582 HCAPLUS

DN 27:52582

OREF 27:4698a-c

TI The constitution of artificial resins. III. Hardenable and unhardenable arylsulfonamide-formaldehyde resins and the question of hardenability in general

AU Walter, Georg; Gluck, Andreas

SO Kolloid-Beihefte (1933), 37, 343-77

CODEN: KOBEAN; ISSN: 0368-6345

DT Journal

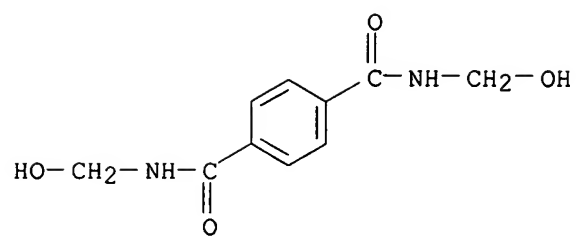
LA Unavailable

AB cf. C. A. 26, 3941. As an illustration of the rule that infusibility and insolubility of a resin result only when there is more than one reactive (condensing or polymerizing) group in the mol. is presented the fact that arylsulfonamide-formaldehyde resin can be made infusible and insol., whereas arylmonosulfonamide-formaldehyde resin cannot. With alc. HCl the latter yields crystalline methylene compds., arylsulfonamide and CH₂O and probably consists of 3-membered methylenemethylolarylsulfonamide groupings carrying one terminal methylol group. Crystalline dimethylenemethylol-tri-o-toluenesulfonamide was isolated from the reaction products. The hardenable arylsulfonamide-formaldehyde resin also is built up of methylene-methylol groupings, which can, however, in many cases go over into pure dimethylenearylsulfonamides (or their polymers) of resinous character.

IT **32445-18-4**, Terephthalamide, N,N'-bis(hydroxymethyl)-
(preparation of)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



=>